INDEX TO VOLUME XLIX.

A.

Academy of Natural Sciences of Philadelphia, Proceedings of, noticed, 183.
Acari, production of, 227.
Allotropism of chlorine, 346.
Altai mountains, geological constitution of, 378.
Aluminum, compact, 390.
American Geologists and Naturalists, Association of, sixth meeting, 219.
Ammonia, carbonate of, its combinations with magnesia and zinc, 200.
decomposition of salts of, 392.
Amphianthus pusillus, a new plant, 127.
Analysis of copper and silver from Kewenaw Point, Lake Superior, 91.
of bituminous coals, 169.
of the blood, 201.
of nitroline, 204.
of alloys of tin and antimony, 206.
of meteoric iron, 343.
of hydraulic cements, 383.
of Thomaite, 393.
of Sillimanite, 396.
of the Tagua nut, 400.
Anastatic printing, method of, 401.
Antimony, gray, at Lyme, N. H., 228.
Apparatus, new philosophical, 20.

B.

Bache, A. D., his improvements in the Coast Survey noticed, 229.
Barometer, observations of, at Hudson, Ohio, 266.
new self-registering, 400.
Barreswil, M., on the decomposition of benzoic acid and hydruret of benzoile, 194.
Batrachian footmarks, new species of, 79.
Benzoic acid and hydruret of benzoile, decomposition of, 194.
Berzelius, J. J., on the oxide of phosphorus, 193.
letter of Dr. Hare to, on chemical nomenclature, 249.
Bile, test for, 206.
Bingham, H., on the fall of meteorites in the Sandwich Islands, 407.
Bird, gigantic, sculpture of, 403.
Bischof, G., on the origin of quartz and metalliferous veins, 396.
Blood, new method of analyzing, 201.
Blume, Prof., on the substitution of the leaves of the coffee tree for tea, 401.
Blyth, J., on the decomposition of narcotine, 206.
Bones taken from guano, change in, 391.
Bonomi, Mr., on the ancient sculpture of a gigantic bird, 403.
Botta, Mons., discoveries amongst the ruins of Nineveh, 116.
Boudault, M., on the decomposition of benzoic acid and hydruret of benzoile, 194.
Boussingault's Rural Economy noticed, 182.
Bouvé, T. T., review of Dr. Jackson's Final Report on the Geology and Mineralogy of New Hampshire, 27.
Bromine, occurrence of in Ohio, 211.
Bryson, R., new self-registering barometer, 400,
Butter, volatile acids of, 202.

C.

Cappezuoli, Dr., on the detection of sugar in diabetic urine, 200.
Carbonic acid, new instrument for the solidification of, 206.
Caricography, 42.
Cassin, J., description of a new Vulture, 186,
Cathartes Burrovianus, 186.
Cements, hydraulic, analyses of, 383.
Charcoal, animal, action of, 393.
Chevalier, M., analysis of the alloys of tin and antimony, 206.
Chlorine, allotropism of, 346.
and hydrogen, relations of, 355.
Clouds, observations of, at Hudson, Ohio, 281.
at Nantucket, Mass., 406.
Coals, heating power of, 166.
American, Prof. Johnson's Report on, reviewed, 310.
Coast Survey of the United States, 229.
Coffee tree, leaves of, a substitute for tea, 401.
Coloring substances in wine, test for, 198.
Columbite, composition of, 228.
Comets of 1845, 230.
Conant, M., description of the Solar Index, 301.
Connel, A., on the Tagua nut, 400.
Copper mines of Lake Superior, 64.
and silver of Kewenaw Point, Lake Superior, 81.
atomic weight of, 203.
Currents of the ocean, their influence in the transport of rocks, 1.
transporting power of, 2.
of the atmosphere, 6.
electric, in the nerves, denied, 387.

D.

Dana, J. D., on the minerals of trap and the allied rocks, 49.
Daniell's hygrometer, objections to confuted, 277.
Deane, J., on a new species of Batrachian footmarks, 79.
on fossil footmarks and rain-drops, 213.
De Candolle's Prodromus, Vol. IX, noticed, 174.
Theorie Elementaire de la Botanique, noticed, 175.
Delessert, B., botanical museum of, 171.
Deville, M., on guiac resin, 194.

Dewey, C., on caricography, 42.
Diabetes, cause of, 202.
Diabetic urine, how to detect sugar in, 200.
Doepping, O., on the composition of fungi, 393.
Dorudon, a new fossil animal, 216.
Draper, J. W., on the allotropism of chlorine, 346.
Drayton, Mr., method of silvering glass, 198.
Drift of the United States, theories of, 1.
phenomena of, 29.
singular, in Berkshire Co., Mass., 258.
Dupasquier, A., on phosphorus, 197.
on the blue color of gold leaf, viewed by transmitted light, 391.

E.

Ebelman, M., on silicic ether, 192.
Ehrenberg, M., investigations of infusoria, 397.
Electric currents in the nerves denied, 387.
sound, 390.
Electricity, statical, generation of, 93.
animal, 388.
Electro-magnetic engine, new, 131.
Electro-precipitated metals, structure of, 390.
Enamelling of cast iron vessels, 400.
Erdmann, M., on the atomic weights of copper, mercury and sulphur, 203.
Ether, silicic, 192.
Eudyptes chrysocome, or penguin, habits of, 151.
Exploring Expedition, U. S., Capt. Wilkes's Narrative of, reviewed, 149.

F.

Faraday, M., memoir on the Liquefaction and Solidification of Gases, noticed, 373.
on anastatic printing, 401.
Favre, M., on the combination of carbonate of ammonia with magnesia and zinc, 200.
Faye, M., elements of second comet of 1845, 220.
Feldspar, aventurine, 394.
Figuier, L., new method of analyzing the blood, 201.
Footmarks, Batrachian, new species of, 79.
and rain-drops, fossil, 213.
fossil, in Pennsylvania, 216.
Forshey, C. G., on artificial mounds in Louisiana, 38.
Fossil remains from Algoa Bay, 213.
Fownes, G., Manual of Elementary Chemistry, noticed, 379.
Fremy, E., on the compounds of osmium, 199.
Fungi, composition of, 393.

G.

Galvanometer, axial, 136.
Geology, physical, of the United States, 1, 284.
Gibbes, R. W., on Dorudon, a new fossil animal, 216.
Gibbs, O. W., Dissertation on Chemical Classification, noticed, 384.
Glass, method of silvering, 198, 398.
Gold leaf, the blue color of, viewed by transmitted light, 391.
Gray, A., bibliographical notices, 171.
Botanical Text Book, noticed, 189.
Guano, xanthic oxide in, 200.
Guiac resin, a volatile oil obtained from, 194.
Gunpowder, Capt. Mordecai's Report of Experiments on, noticed, 180.

H.

Halos, theory of, 73.
Hare, R., letter to Berzelius on chemical nomenclature, 249.
Henry, J., on the heat of solar spots, 405.
Hermann, M., on the decay and mouldering of wood, 204.
Hitchcock, E., on some phenomena of drift in Berkshire Co., Mass., 258.
Hosford, E. N., on a new instrument for the solidification of carbonic acid, 206.
Hough, F. B., on a burning well in Ohio, 406.
Humboldt, A., on the mean height of continents above the sea, 397.
Humphreys, H., on the saltness of the ocean, and the effects of light on turbid waters, 208.
Hygrometer, observations of, at Hudson, Ohio, 271.
Daniell's, objections to answered, 277.

I.

Icebergs of the Antarctic seas, 150.
Index, Solar, a new magnetical instrument, described, 301.
Infusoria, Prof. Ehrenberg on, 397.
Iodine, fluoride of, 205.
occurs in Ohio, 211.
Iron ore in Bartlett and Lisbon, N. H., 33.
deoxidation of the salts of the peroxide of, 203.
meteoric, in Tennessee and Alabama, 336.
in soils, state of, 394.
vessels, enamelled, 400.

J.

Jackson, C. T., Final Report on the Geology and Mineralogy of New Hampshire, reviewed, 27.
on the copper and silver of Kewenaw Point, Lake Superior, 81.
Jacob, M., on tests for coloring substances in wine, 198.
Johnson, W. R., on the heating power o various coals, 166.
Report on American Coals, reviewed, 310.
Jones, H. B., on the decomposition of salts of ammonia, 392.

K.

Kenawha gas, 209.
Kendall, E. O., observations on the transit of Mercury, May 8, 1845, 149.
elements of third comet of 1845, 221.
Kewenaw Point, Lake Superior, copper and silver of, 81.
King, A. T., on fossil footprints, 216.
Kinic acid, detection of, 391.
Kobell, Prof. von, on the characters of Spadaite, 394.
Koch, A. C., discovery of the Zyglodon in Alabama, 218.
Kraft, C. E., new instrument for the solidification of carbonic acid, 206.
Kunker, a tufaceous deposit in India, 398.

L.

Leavenworth, M. C., on several new plants, 126.
Leeson, H. B., on the fluoride of iodine, 205.
Leibnitz, Mackie's Life of, noticed, 187.
Leonhard, G., Handwörterbuch der Topographischen Mineralogie, noticed, 188.
Lewis, J. A., on the Kenawha gas, 209.
Lewy, B., on Maynas resin, 194.
Lezch, J. U., on the volatile acids of butter, 202.
Light, inflection and interference of, apparatus for experiments on, 26.
effects of on turbid waters, 208.
Lime, phosphuret of, 193.
Lithographic stones, 401.
Loomis, E., meteorological observations at Hudson, Ohio, 266.
supplement to, 406.
Lyell, C., Travels in North America, reviewed, 368.

M.

Mackie, J. M., life of Leibnitz, noticed, 187.
Magnesia and ammonia, carbonate of, 200.
Malacrone, characters of, 394.
Mantell, G. A., Tract on the Geological Structure of the country seen from Leith Hill, noticed, 191.
Marchand, E., method of obtaining nitrogen gas, 195.
on the atomic weights of copper, mercury and sulphur, 203.
Marsh, R., meteorological register at Steubenville, Ohio, for 1844, 212.
Mather, W. W., on the physical geology of the United States, 1, 284.
on the occurrence of bromine and iodine in Ohio, 211.
Matteucci, M., on the hypothesis of electric currents in the nerves, 387.
on animal electricity, 388.
Mayer, M., on the characters of Thomaite, 393.
Maynas resin, 194.
Mercury, atomic weight of, 203.
Mercury, transit of, May 8, 1845, 142.
Du Merril, M., mixture of pure carbonates of potash and soda, 195.
Metals, electro-precipitated, structure of, 390.
Meteor, remarkable, at Fayetteville, N. C., 407.
Meteoric iron in Tennessee and Alabama, 336.
Meteorites, fall of in the Sandwich Islands, 407.
Meteorological register at Steubenville, Ohio, for 1844, 212.
observations at Hudson, Ohio, 266.
supplement to, 406.
Mialhe, L., on the cause of diabetes, 202.
Minerals of trap and the allied rocks, 49.
Mitchell, Miss M., meteorological observations at Nantucket, Mass., 406.
Moa, bones of, 219.
Mordecai, A., Report of Experiments on Gunpowder, noticed, 180.
Mortars, Lieut. Wright's Treatise on, noticed, 379.
Mounds, artificial, in Louisiana, 38.

N.

Narcotine, decomposition of, 205, 206.
Nemostyles cœlestina, 130.
gemmiflora, 131.
Nerves, electric currents in, denied, 387.
Newbold, Capt., on the Kunker, a tufaceous deposit in India, 398.
Nineveh, ruins of, 113.
Nitrogen gas, easy mode of obtaining, 195.
Nitroline, analysis of, 204.
Nomenclature, chemical, Dr. Hare on, 249.

O.

Olmsted, D., report of observations on the transit of Mercury, May 8, 1845, 142.
Opianic acid, 205.
Osmium and its compounds, 199.
Owen's Illustrated Catalogue, noticed, 190.
Ozone, properties of, 195.

P.

Page, C. G., new electro-magnetic engine, 131.
on axial galvanometer, 136.
on double axial reciprocating engine, 139.
Parhelion, singular case of, 73.
Parietin, properties of, 195.
Peirce, B., elements of third comet of 1845, 221.
Pelletier, M., on guiac resin, 194.
Penguins, habits of, 151.
Pettenkoffer, M., test for bile, 206.
Phillips, R., on the state of iron in soils, 394.
Phosphorus, oxide of, 193.
impurities of, 197.
Pirira, M., on salicine, 392.
Plants, description of several new, 126.
Plessy, M., on the hydrosulphite of soda, 200.
Plumbago formed by pressure, 227.
Polycrase, characters of, 394.
Postage in England, 228.
Potash, preparation of carbonate of, free from silica, 195.
and soda, mixture of pure carbonates of, 195.
Potassium, deoxidation of the ferridcyanide of, 203.
Printing, anastatic, 401.

Q.

Quartz, origin of, 396.

R.

Railroads, atmospheric, 228.
Rain, observations of, at Hudson, Ohio, 282.
Rain-drops, fossil, in Connecticut valley, 213.
Rains, G. W., on the generation of statical electricity, 93.
Regents of the University of New York, 58th annual report, noticed, 176.
Resin, guiac, 194.
Maynas, 194.
Review of Dr. Jackson's Final Report on the Geology and Mineralogy of New Hampshire, 27.
of Capt. Wilkes's Narrative of U. S. Exploring Expedition, 149.
of Prof. Johnson's Report on American Coals, 310.
of Mr. Lyell's Travels in North America, 368.

Rose, H., examination of Columbite, 228.
Rosse, Earl of, large telescope of, 221.
Rue, W. de la, on the structure of electro-precipitated metals, 390.
Ruggles, D., on the copper mines of Lake Superior, 64.
on a large trilobite, and Iowa coralline marble, 216.

S.

Salicine, properties of, 392.
Saltness of the ocean, 208.
Scheerer, M., on aventurine feldspar, 394.
on Polycrase and Malacrone, 394.
Schenck, M., on the transit of Mercury, May 5, 1832, 148.
Schlossberger, F., on the composition of fungi, 393.
Schönbein, M., on the properties of ozone, 195.
on the deoxidation of the ferridcyanide of potassium and the salts of the peroxide of iron, 203.
Sea waves, instruments for illustrating, 20.
Sedimentary rocks of the United States, phenomena of, 1.
causes of their elevation above the level of the sea, 284.
Sigillariæ and Stigmariæ, their identity, 227.
Silicification of organic bodies, 227.
Silicic ether, 192.
Sillimanite, analysis of, 396.
Silver and copper of Kewenaw Point, Lake Superior, 81.
hyperoxide of, 194.
superoxide of, 391.
Silvering of glass, 198, 398.
Smith, A., on the ruins of Nineveh, 113.
J. L., abstracts of the researches of European chemists, 192.
Snell, E. S., on new philosophical apparatus, 20.
on a singular case of parhelion, and the theory of halos, 73.
Soda, hydrosulphite of, 200.
Solar Index, a new magnetical instrument, described, 301.
spots, heat of, 405.
Sophora affinis, a botanical species, 130.
Sound, waves of, apparatus for illustrating, 20.
electric, 390.
South, Sir James, on Lord Rosse's large telescope, 221.
Spadaite, characters of, 394.
Statical eletricity, generation of, 93.
Steam navigation, applicability of American coals to, 310.
Stenhouse, J., on the detection of kinic acid, 391.
on the silvering of glass, 398.
Stone, singular dispersion of blocks of, in Berkshire Co., Mass., 258.
lithographic, 401.
Styrole, properties of, 392.
Substitutions, theory of, as connected with the allotropism of chlorine, 346.
Sugar in diabetic urine, detection of, 200.
Sulphur, atomic weight of, 203.
Survey of the coast of the United States, 229.

T.

Tagua nut, properties of, 400.
Tchihatcheff, P. de, memoir on the Geological Constitution of the Altai Mts. noticed, 378.
Telescope, large, Earl of Rosse's, 221.
Thenard, M., on phosphuret of lime, 193.
Thermometer, observations of, at Hudson, Ohio, 271.
Thomaite, a new mineral species, 393.
Thomson, R. D., on parietin, 195.
Thomson, T., analysis of Sillimanite, 396.
Tides, observations on, in the Coast Survey, 240.
Tin ore, found in Jackson, N. H., 34.
and antimony, analysis of the alloys of, 206.
Trap, minerals of, and the allied rocks, 49.
Trilobite, large, 216.
Troost, G., on masses of meteoric iron found in Tennessee and Alabama, 336.

U.

Ulmus crassifolia, a botanical species, 129.
Unger, M., on xanthic oxide in guano, 200, 391.
University of the State of New York, 58th annual report of the Regents, noticed, 176.
Urine, diabetic, how to detect sugar in, 200.

V.

Vestiges of the Natural History of Creation, noticed, 191.
Voorhies, J., on the fall of meteoric iron in Tennessee, 338.
Vulture, description of a new species of, 186.

W.

Wallquist, M., on hyperoxide of silver, 194.
Warrington, R., on the composition of bones taken from guano, 391.
on the action of animal charcoal, 393.
Water, decomposition of, by chlorine in the sun's rays, 348.
Wave motion, instruments for illustrating, 20.
Well, burning, in Ohio, 406.
Wells, temperature of, 272.
Whitney, J. D., translation of Berzelius on the Blowpipe, noticed, 379.
Wilkes, C., Narrative of the United States Exploring Expedition, reviewed, 149.
Wilkes, Mr., experiments on the production of Acari, 228.
Winds, observations of, at Hudson, Ohio, 279.
Wine, test for coloring substances in, 198.
Wöhler, F., on the decomposition of narcotine, 205.
on compact aluminum, 390.
Wood, A., Class-Book of Botany, noticed, 190.
Wood, decay and mouldering of, 204.
Wright, W. H., Treatise on Mortars, noticed, 379.

X.

Xanthic oxide in guano, 200.
Xanthine, 391.

Z.

Zyglodon of Alabama, skeleton of, 218.
Zinc, sulphuret of, in Eaton, N. H., 34.
and ammonia, carbonate of, 200.